

What is a Concussion?

Concussion is a traumatic brain injury that alters the way your brain functions. Effects are usually temporary, but it is a significant injury not to be taken lightly. It can include problems with headache, concentration, memory, judgment, balance and coordination. A concussion changes the way your brain normally works and communicates. It can range from mild to severe and presents itself differently for each person.

Although concussions usually are caused by a blow to the head, they can also occur when the head and upper body are violently shaken. These injuries can cause a loss of consciousness, but most concussions do not. Many people have concussions and don't realize it or don't believe that they have one, even when signs of concussion are present.

Signs & Symptoms of a Concussion

Signs and symptoms of a concussion may include:

- Headache or a feeling of pressure in the head
- Temporary loss of consciousness
- Confusion or feeling as if in a fog
- Amnesia surrounding the traumatic event
- Dizziness or "seeing stars"
- Ringing in the ears
- Nausea or vomiting
- Slowness in thought/activity
- Slurred speech
- Fatigue
- Concentration and memory complaints
- Irritability and other personality changes
- Sensitivity to light and noise
- Sleep disturbances/difficulty sleeping
- Depression and anxiety

When to Seek Additional Care

Sometimes serious problems develop after a head injury. Return immediately to the emergency department if you experience any of the following symptoms:

- Repeated vomiting
- Worsening headache
- Loss of consciousness or unable to stay awake during times you would normally be awake
- Getting more confused, restless or agitated
- Convulsions or seizures
- Difficulty walking or difficulty with balance
- Weakness or numbness
- Difficulty with your vision

Precautions

- **DO NOT** drive a motorized vehicle until cleared by a physician!
- **DO NOT** take aspirin, Aleve, Advil or other anti-inflammatory medications until cleared to do so by a physician!
- **MEDICATIONS:** You may take the following medications as directed on the bottle:
 - Acetaminophen (Tylenol)
 - Fish Oil (Omega 3 supplement)**(DO NOT take more than the recommended dose.)**

How to Recover from a Concussion

Your brain needs time to heal. This requires complete rest—both mentally and physically.

Rest is the MOST important part of the recovery process. You do not need to wake up the patient or keep him/her from sleeping, but there does need to be someone close by to monitor him/her for the first few days.

Activities that involve a lot of concentration, such as studying, working on the computer, texting, or playing video games may cause concussion symptoms (such as headache or tiredness) to reappear or get worse. This does mean that going to school can worsen symptoms and prolong recovery. ANY physical exertion will lengthen recovery time. Your doctor may provide information about delaying return to school, returning for half days or going to the nurse's offices to lie down if symptoms worsen.

While your brain is still healing, you are much more likely to have a repeat concussion. In rare cases, repeat concussions can cause permanent brain damage and even death. This is called Second Impact Syndrome. Severe permanent brain injury and death are the most common results from a Second Impact Syndrome. **Until you completely recover from your concussion, you will be held from ALL athletic activity.**

When Can I Return to an IHSAA Sport Activity?

You have been initially evaluated by a physician or athletic trainer and they have determined that you meet criteria for a concussion. You should arrange to undergo further testing to determine how the concussion is affecting your ability to balance and process information. You should be followed regularly by your athletic trainer to monitor your symptoms and follow up with a physician trained in treating concussions within 3 days (unless otherwise instructed).

Before returning to your Indiana High School Athletic Association (IHSAA) sport, you must be evaluated by your physician and be medically cleared for return. This **must** be obtained in writing.

BCSC, Columbus Regional Health and Southern Indiana Orthopedics strongly encourage a 5-step process before returning to full activity:

1. Be completely symptom free.
2. Pass a manually administered cognitive and neurological test performed by someone trained in the management of concussions.
3. Pass a computerized neuropsychological test (i.e. IMPACT test).
4. Pass a physical exertion test administered by your trainer or therapist.
5. Gradual return to all activities.

Play it safe! Follow your treatment plan after a concussion!

This handout was designed and supported by the Sports Medicine Program of Columbus Regional Health for educational purposes. To find out more about our Sports Medicine Program, physical therapy and occupational therapy, call 812-376-5806.